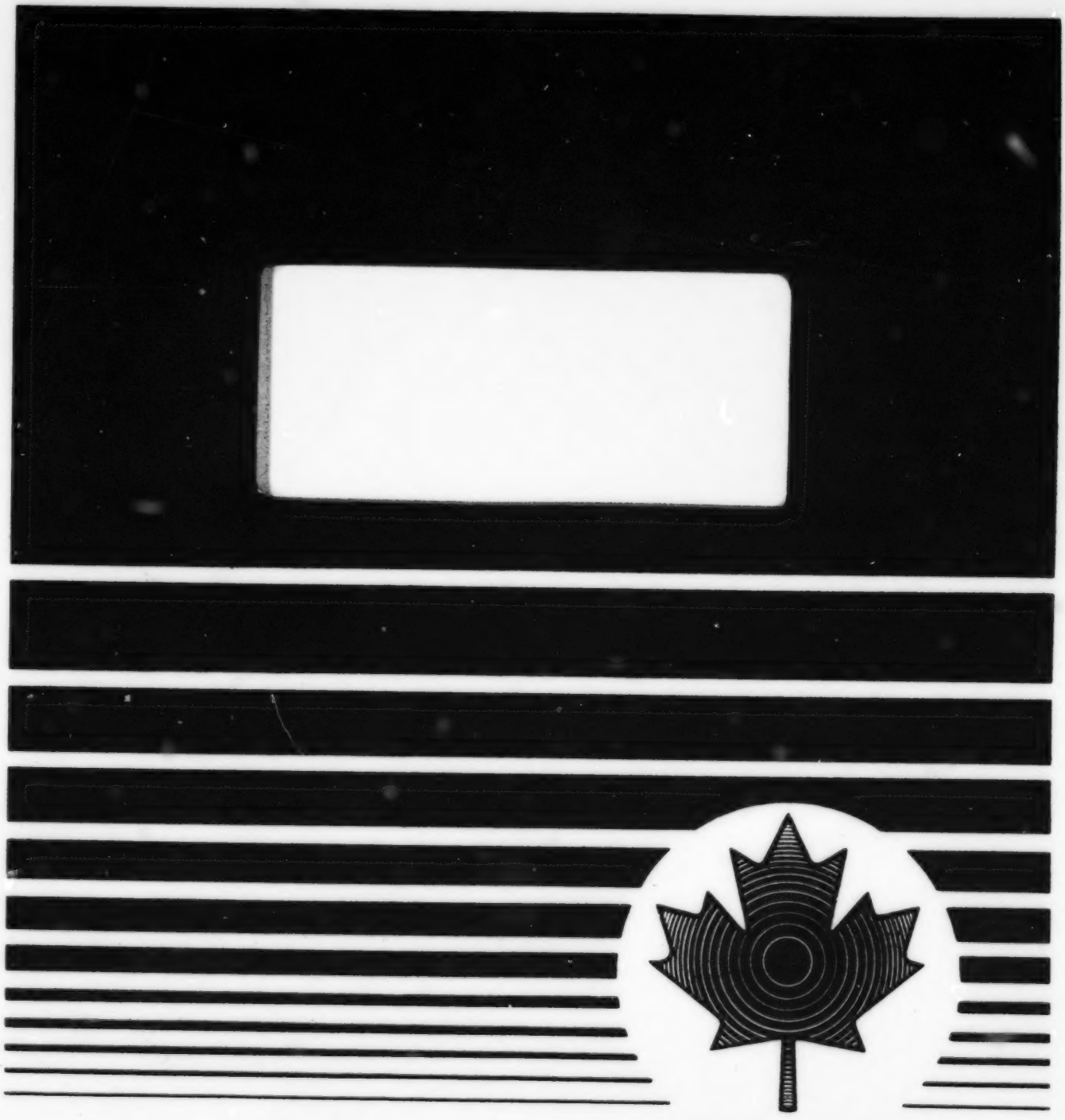

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THE EFFECT OF THE WESTERN ACCORD AND RECENT PROVINCIAL ROYALTY CHANGES ON PETROLEUM INDUSTRY CAPITAL EXPENDITURES

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CONTENTS

TABLES ii

PREFACE iii

EXECUTIVE SUMMARY iv

CHAPTER 1 INTRODUCTION 1

1.1 Background to the Study 1

1.2 Objective of the Study 2

1.3 Study Organization 2

CHAPTER 2 SURVEY RESPONSE RATES 3

2.1 Company Size 3

2.2 Employment 6

2.3 Regional Distribution of 1984 Capital Expenditures 6

CHAPTER 3 SURVEY RESULTS 9

3.1 Capital Expenditures 9

3.1.1 Capital Expenditure Plans 9
3.1.2 Capital Expenditures in Foreign Jurisdictions 14
3.1.3 Types of Capital Expenditures 14

3.2 Significant Factors Affecting Respondents 14

3.2.1 Factors Affecting Capital Expenditure Intentions 15
3.2.2 Factors Affecting 1985 and 1986 Cash Flow 15
3.2.3 Factors Affecting Reinvestment Intentions in 1986 and Beyond 16
3.2.4 Effect of PGRT Phase-Out 16

CHAPTER 4 SUMMARY 19

APPENDIX A SURVEY METHODOLOGY 21

A.1 Questionnaire Design and Administration 22

A.2 Questionnaire Editing and Processing 22

APPENDIX B QUESTIONNAIRE 23

TABLES

2.1 Survey Response Rates 4

2.2 Distribution of Respondents by Company Group, Canadian Ownership, and 1984 Capital Expenditure Level 5

2.3 Regional Distribution of 1984 Capital Expenditures of Survey Respondents 7

3.1 Actual/Planned Canadian Capital Expenditures of Survey Respondents by Canadian Ownership Level, 1984-1986 10

3.2 Actual/Planned Canadian Capital Expenditures of Survey Respondents by Level of Capital Expenditures, 1984-1986 11

3.3 Change in Short-Term and Long-Term Capital Expenditure Plans of Survey Respondents Due to the Western Accord and Recent Provincial Royalty Changes 13

PREFACE

This assessment of the impact of the Western Accord and provincial royalty changes introduced in 1985 on the capital investment intentions of the oil and gas industry is based on the results of a survey undertaken in January 1986, prior to the dramatic decline in world oil prices. The results indicate the extent to which the fiscal policy initiatives affected the capital expenditure intentions of the survey respondents before their capital spending plans were affected by sharply reduced world oil prices. The data in this report do not serve as a forecast, but rather as an indication of the likely impact of certain policy changes on the capital investment intentions of the Canadian oil and gas industry as of the survey date.

The author and the Executive Director of the Institute would like to express their gratitude to the advisory committee for the insight which they provided throughout the course of the project. Mention is also due to the Canadian Petroleum Association and to the Independent Petroleum Association of Canada for their cooperation in encouraging their members to respond to the survey.

Special thanks go to Brian Cox for computerizing the database and formulating the extensive reporting facility required for the report.

EXECUTIVE SUMMARY

- This report presents the results of a January 1986 survey of oil and gas companies regarding the impact of the Western Accord and provincial royalty changes introduced in 1985 on their capital expenditure intentions. The results presented here do not represent a forecast of capital expenditures, but rather provide an indication of the capital investment intentions of the oil and gas industry prior to the dramatic decline in world oil prices and of how those intentions were influenced by the Western Accord and the provincial government royalty changes.

- The results are based on 107 responses which constitute a representative sample of the oil and gas industry, covering 84 percent of total 1984 industry employment and 64 percent of total 1984 industry capital expenditures. The results have not been extrapolated to the entire industry and, therefore, understate the total impact.

- Some 75 percent of respondents reported that their 1985 and 1986 actual/planned capital expenditures were higher than they would have been without the Western Accord and the provincial royalty changes. This amounted to about a half billion dollar net increase in capital expenditures in each year, for an average increase of about $5 million per company.

- The employment impacts of additional capital expenditures by the operators would be largely felt in the oilfield service and supply industry. The survey respondents themselves reported a 15 percent increase in employment in 1985 and expected a small increase in 1986.

- PGRT phase-out and Alberta royalty changes were consistently indicated as the most significant positive factors influencing the respondents' capital expenditure and reinvestment intentions as well as their cash flow. Oil and/or gas prices and market expectations and PIP phase-out were reported as the most significant negative factors in this regard. Corporate restructuring, acquisitions, and "success" were also mentioned as positive factors. Debt repayment was a significant negative factor in the expected percentage of net cash flow to be reinvested.

- Overall, the survey results indicate that the Western Accord and recent provincial royalty changes had a significant positive effect on the capital expenditure intentions of the oil and gas industry. The recent decline in world oil prices has reduced the industry's cash flow and will likely keep capital outlays below the levels indicated in the survey. Nevertheless, it is clear that the fiscal policy initiatives affected the industry's capital investment intentions positively.

Chapter 1

INTRODUCTION

1.1 Background to the Study

On March 28, 1985 the Canadian government and the governments of Alberta, Saskatchewan, and British Columbia signed an agreement which ushered in a new era of deregulation in the oil and gas industry. The Western Accord put an end to much of the government regulation of the industry imposed by the National Energy Program (NEP). The intent of the Accord was followed through by changes in provincial royalty and fiscal systems which provided the industry with further incentive to increase capital investment and employment. Canada's Energy Minister, the Honourable Pat Carney, indicated that her government would be watching the performance of the industry based on the Accord to assess the extent of private sector response to the policy changes.

The Canadian Energy Research Institute has undertaken to assess the effect of the Western Accord and recent provincial government royalty changes on capital investment intentions by the oil and gas industry. The intent of the research was to quantify the effect of the fiscal policy initiatives, and to qualitatively evaluate which elements of the Accord and/or the provincial royalty changes most significantly contributed to these changes.

Information was gathered by means of a questionnaire survey of major oil and gas operators undertaken in January of 1986. The survey covered members of the Canadian Petroleum Association (CPA) and the Independent Petroleum Association of Canada (IPAC) as well as other major non-association companies among the top producers in the industry. Both Associations provided covering letters to their members in support of the undertaking.

Companies were quick to respond to the questionnaires throughout January and the early part of February. However, by the middle of February it was clear that other factors were influencing the responses. While world oil prices had been falling throughout January, by the beginning of February the extent of the decline was having a negative effect on the industry's capital expenditure intentions.

Questionnaire respondents began to indicate reservations about the certainty of their stated plans, and earlier respondents indicated that answers which they had provided were outdated in light of the price decline. Falling world oil prices had clearly begun to offset the effects of the fiscal policy initiatives of the federal and provincial governments on the industry's capital expenditure intentions.

In light of these circumstances, the results of those questionnaires thought to be relatively unbiased by the decline in world oil prices have been aggregated and summarized. The results indicate that the Western Accord and the provincial government royalty changes had affected the capital investment intentions of the industry positively. While the actual impact will be obscured by the decline in world oil prices, the results of this research provide a valuable "snapshot" of the likely consequences of these fiscal policy initiatives on the capital expenditure intentions of the Canadian oil and gas industry.

1.2 Objective of the Study

The objective of this report is to present the results of the aforementioned survey. These figures have not been extrapolated to the entire industry; a critical factor in interpreting the results presented. The information contained in the report indicates the plans of some 60 percent (in terms of their 1984 capital expenditures) of the Canadian oil and gas industry prior to the negative influence of declining world oil prices. This report, therefore, does not represent a forecast, but rather an indication both of intentions prior to the dramatic oil price fall and of how those intentions were influenced by the Western Accord and the provincial government royalty changes.

1.3 Study Organization

Chapter 2 outlines the survey response rates. The survey results are presented in Chapter 3. Chapter 4 provides an overall summary of the report. Finally, Appendices A and B contain the survey methodology and the questionnaire used in the survey, respectively.

Chapter 2

SURVEY RESPONSE RATES

A total of 107 companies of the target population of 252 provided valid responses to the survey. (Appendix A outlines the survey methodology.) This chapter analyzes the response rate by company size and Canadian ownership level, by employment level, and by regional distribution of 1984 capital expenditures. The analysis indicates adequate coverage in all respects as well as an acceptable distribution of results within each breakdown.

2.1 Company Size

Overall, some 43 percent of companies in the target population provided usable questionnaires (see Table 2.1). The response rate for CPA companies was somewhat higher at 48 percent, while the rate for non-association companies was only 33 percent.

The respondents were separated according to their Canadian Ownership Rating (COR less than or equal to 50 percent or COR greater than 50 percent) and their level of 1984 capital expenditures (small, less than or equal to $5 million; medium, greater than $5 million but less than $50 million; and large, greater than or equal to $50 million). More than half of the respondents were small or medium-sized Canadian companies (see Table 2.2). Over one-quarter of the respondents were small or medium-sized foreign operators.

This distribution reflects the large number of IPAC companies, 66 percent of which were small or medium-sized Canadian companies. In contrast, almost one-third of CPA respondents were large foreign-owned operators, and another 24 percent were large Canadian operators. Only four IPAC respondents were large companies, three of which were Canadian owned.

Overall, 64 percent of firms were Canadian, and 44 percent were medium-sized.

TABLE 2.1

SURVEY RESPONSE RATES

Company Group	Number of Questionnaires				Usable Target Population (%)
	Sent	Target Population[a]	Total Returned	Usable Returned[b]	
CPA	61	52	27	25	48.1
IPAC	193	182	97	76	41.8
Other	21	18	8	6	33.3
Total	275	252	132	107	42.5

[a]The target population includes only those firms relevant to the report. The 23 firms eliminated from the initial list of firms were largely firms with no upstream activities or firms not currently active. See Appendix A.

[b]Some 25 responses were not usable as their answers were likely influenced by the falling world oil price. See Appendix A.

TABLE 2.2

DISTRIBUTION OF RESPONDENTS BY COMPANY GROUP, CANADIAN OWNERSHIP, AND 1984 CAPITAL EXPENDITURE LEVEL
(number of respondents)

1984 Capital Expenditure Level[a]	CPA Companies			IPAC Companies			Other Companies			Total		
	COR≤50%	COR>50%	TOTAL	COR≤50%	COR>50%	TOTAL	COR≤50%	COR>50%	TOTAL	COR≤50%	COR>50%	TOTAL
≤$5 million	4	1	5	11	22	33	-	1	1	15	24	39
$5-$50 million	3	3	6	11	28	39	-	2	2	14	33	47
≥$50 million	8	6	14	1	3	4	-	3	3	9	12	21
Total	15	10	25	23	53	76	-	6	6	38	69	107

[a]Gross capital expenditures, before deducting PIP grants.

2.2 Employment

Oil and gas operators employed a total of 36,580 persons in 1984.[1] Survey respondents reported 1984 employment of 30,803; 84 percent of the total.

2.3 Regional Distribution of 1984 Capital Expenditures

Each respondent indicated the one area in which most of their 1984 capital expenditures were made, and the percentage of total capital expenditures spent in that area. The dollar amounts for each region were derived by multiplying the given percentage by the actual 1984 capital expenditure figure and summing for each region. The companies did not specify the regional distribution of all their 1984 capital expenditures. Hence, the total regional figures reported represent only the sum of the expenditures of the major area of activity indicated by each respondent.[2] The distribution of results is presented in Table 2.3.

The distributions are intuitively appealing, with a small percentage of companies with most of their 1984 capital expenditures in the Beaufort Sea and the East Coast Offshore accounting for over 30 percent of the total regional expenditures identified. Conversely, while 80 percent of companies reported Alberta as the area in which most of their 1984 capital expenditures were made, these companies represented only 66 percent of total regional expenditures reported by the respondents.

Based on a comparison with CPA data, some 64 percent of total 1984 capital expenditures were made by the survey respondents. Moreover, the survey results provide a representative sample of regional industry activity in that a significant proportion of 1984 total expenditures was captured by the results in each of the major areas of activity: Alberta, 54 percent; Beaufort Sea, 26 percent; and East Coast Offshore, 61 percent.

Each distribution outlined above indicates that the survey respondents provide a representative sample of the entire industry, accounting for a significant portion of both the industry's total capital expenditures and employment, and having a distribution by company size, type, and expenditures characteristic of the industry.

TABLE 2.3

REGIONAL DISTRIBUTION OF 1984 CAPITAL EXPENDITURES
OF SURVEY RESPONDENTS

	Distribution of Cos.		Distribution of Capital Expenditures				
			Survey[a]		CPA Data[b]		Survey/CPA
	(No.)	(%)	($millions)	(%)	($millions)	(%)	(%)
British Columbia	3	2.8	0.4	--	324.9	4.0	0.1
Alberta	85	79.4	2,428.3	66.4	4,528.8	55.1	53.6
Saskatchewan	11	10.3	67.6	1.8	699.3	8.5	9.7
Manitoba	1	0.9	23.4	0.6	62.2	0.8	37.6
Ontario	-	-	-	-	52.7	0.6	-
Quebec	-	-	-	-	0.8	--	-
N.W.T.	-	-	-	-	c	N/A	N/A
Yukon	-	-	-	-	c	N/A	N/A
Beaufort Sea	3	2.8	295.6	8.1	1,150.0	14.0	25.7
East Coast Offshore	4	3.7	842.8	23.0	1,394.2	17.0	60.5
Total Regions[d]	107	100.0	3,658.1	100.0	8,212.9	100.0	44.5
Total 1984[e]	N/A	N/A	5,566.8	N/A	8,733.7	N/A	63.7

SOURCE: (1) Survey results; and (2) Canadian Petroleum Association, CPA Statistical Handbook (Calgary: Canadian Petroleum Association, 1985), Section IV, Tables 1 and 14.

[a]Before deducting PIP grants. The dollar figures were calculated by multiplying the percentage accorded by each respondent to their one major area of activity in 1984 by their total 1984 capital expenditures and summing for each area. Respondents did not provide a total breakdown of 1984 capital expenditures for all regions. The percentages refer to the percent of total reported regional expenditures attributed to each area.

[b]Exploration and development expenditures.

[c]Not separately reported. Beaufort Sea includes Territories and Arctic Islands.

[d]Total of regions listed.

[e]Total 1984 capital expenditures for Canada. Survey data is total for all respondents. CPA data includes Atlantic Provinces, Hudson Bay Offshore, West Coast Offshore, and Alberta Oil Sands expenditures.

Footnotes

[1]Statistics Canada, The Crude Petroleum and Natural Gas Industry, Catalogue No. 26-213, Annual (Ottawa: Minister of Supply and Services Canada, 1985), p. 41.

[2]Some 66 percent of the total 1984 capital expenditures recorded by respondents was captured by the regional analysis.

Chapter 3

SURVEY RESULTS

3.1 Capital Expenditures

As discussed in the previous chapter, the survey results were aggregated for all questionnaires which, to the best of our knowledge, were not biased by the decline in world oil prices. This chapter presents the results for this group of 107 respondents only.

3.1.1 Capital Expenditure Plans

The actual/planned capital expenditures of the respondents for 1984 to 1986 indicated a generally rising trend over the period. On a net basis (net of PIP grants), capital expenditures increased 19 percent in 1985 and were expected to increase 13 percent in 1986 (see Table 3.1). On a gross basis (before deducting PIP grants), capital expenditures increased by 12 percent in 1985, but were expected to increase by only one percent in 1986.[1]

Canadian firms (with a Canadian Ownership Rating greater than 50 percent) accounted for 60 to 70 percent of actual/planned capital expenditures but indicated lower than average growth rates in their planned expenditures (see Table 3.1). The 8 percent decrease in the 1986 gross capital expenditure plans of Canadian firms indicates the effect of PIP phase-out. Nevertheless, an increase of 7 percent was reported for their 1986 net capital expenditure plans.

Foreign companies (with Canadian Ownership Rating less than or equal to 50 percent) accounted for only 30 to 40 percent of actual/planned capital expenditures but expected growth rates of 20 to 30 percent in their 1985 and 1986 capital expenditures.

Small companies (with 1984 capital expenditures less than or equal to $5 million) accounted for only about 2 percent of total capital expenditures, but indicated the largest percentage increases over the three-year period; 25 to 40 percent (see Table 3.2). Medium-sized companies (with 1984 capital expenditures between $5 and $50 million) reported increases of more than 20 percent in both gross and

TABLE 3.1

ACTUAL/PLANNED CANADIAN CAPITAL EXPENDITURES OF SURVEY RESPONDENTS BY CANADIAN OWNERSHIP LEVEL 1984-1986

Canadian Ownership Level	Before Deducting PIP Grants			Net of PIP Grants		
	($millions)	(% change)[a]	(% of total)	($millions)	(% change)[a]	(% of total)
Canadian Firms[b]						
1984	4,075.93	N/A	73.2	2,831.96	N/A	66.1
1985	4,311.63	5.8	68.9	3,184.30	12.4	62.5
1986	3,975.78	(7.8)	62.8	3,408.54	7.0	59.4
Foreign Firms[c]						
1984	1,490.81	N/A	26.8	1,451.81	N/A	33.9
1985	1,942.12	30.3	31.1	1,909.52	31.5	37.5
1986	2,356.08	21.3	37.2	2,331.68	22.1	40.6
Total						
1984	5,566.75	N/A	100.0	4,283.78	N/A	100.0
1985	6,253.75	12.3	100.0	5,093.82	18.9	100.0
1986	6,331.86	1.2	100.0	5,740.22	12.7	100.0

[a]Year-to-year percentage change.
[b]Canadian Ownership Rating greater than 50 percent (69 companies).
[c]Canadian Ownership Rating less than or equal to 50 percent (38 companies).

TABLE 3.2

ACTUAL/PLANNED CANADIAN CAPITAL EXPENDITURES OF SURVEY RESPONDENTS BY LEVEL OF CAPITAL EXPENDITURES 1984-1986

1984 Capital Expenditure Level[a]	Before Deducting PIP Grants			Net of PIP Grants		
	($millions)	(% change)[b]	(% of total)	($millions)	(% change)[b]	(% of total)
≤$5 million[c]						
1984	82.38	N/A	1.5	75.90	N/A	1.8
1985	117.08	42.1	1.9	106.25	40.0	2.1
1986	147.89	26.3	2.3	140.75	32.5	2.5
$5-$50 million[d]						
1984	837.87	N/A	15.1	727.28	N/A	17.0
1985	1,021.68	21.9	16.3	895.78	23.2	17.6
1986	926.97	(9.3)	14.6	838.47	(6.4)	14.6
≥$50 million[e]						
1984	4,646.50	N/A	83.5	3,480.60	N/A	81.3
1985	5,115.00	10.1	81.8	4,091.80	17.6	80.3
1986	5,257.00	2.8	83.0	4,761.00	16.4	82.9
Total[f]						
1984	5,566.75	N/A	100.0	4,283.78	N/A	100.0
1985	6,253.75	12.3	100.0	5,093.82	18.9	100.0
1986	6,331.86	1.2	100.0	5,740.22	12.7	100.0

[a]Gross capital expenditures, before deducting PIP grants.
[b]Year-to-year percentage change.
[c]Thirty-nine companies.
[d]Forty-seven companies.
[e]Twenty-one companies.
[f]Figures may not add due to rounding.

net 1985 capital expenditures over 1984, but decreases in 1986 over 1985.[2] Large companies (with 1984 capital expenditures greater than or equal to $50 million) indicated consistent increases in their net 1985 and 1986 capital expenditure plans, but a lower percentage increase in their gross 1986 expenditure plans.

These figures must be interpreted in light of what they might have been without the Western Accord and the provincial royalty changes. Almost one-quarter of respondents indicated a positive change in their 1984 capital expenditures in anticipation of changes to the NEP and/or as a result of the change in federal government in September of 1984. On the other hand, only 4 percent of respondents indicated a decrease in 1984 capital expenditures for these reasons. The net effect was an increase of almost $150 million in capital expenditures in 1984.[3]

In addition to the above, companies also indicated whether their 1985 and 1986 actual/planned capital expenditures were higher or lower than they would have been without the Western Accord and the provincial royalty changes.[4] Three-quarters of respondents indicated a positive change, only 6 percent indicated a negative change, and 19 percent were not affected (see Table 3.3). In fact, almost 50 percent of all respondents indicated a positive change of at least 10 percent, while less than 2 percent indicated a corresponding negative change.

These positive and negative changes resulted in a net increase in the respondents' 1985 capital expenditures of $625 million before deducting PIP ($478 million net of PIP). The net projected change for 1986 was $638 million before deducting PIP and $570 million after PIP.[5] These figures represent an average increase of about $5 million for each respondent.

The long-term (1987 to 1990) capital expenditure plans of respondents were similarly affected by the Western Accord and the provincial royalty changes. The percentage of companies which planned to increase their long-term capital expenditures was slightly greater than for the short-term, while the percentage of companies which planned to decrease their long-term expenditures was slightly lower than for the short-term.

One important result of an increase in capital expenditures is the income and employment generated in the service and supply sectors by such expenditures. The survey respondents themselves indicated a 15

TABLE 3.3

CHANGE IN SHORT-TERM AND LONG-TERM CAPITAL EXPENDITURE PLANS OF SURVEY RESPONDENTS DUE TO THE WESTERN ACCORD AND RECENT PROVINCIAL ROYALTY CHANGES

	Higher	Lower	Unchanged	Total[a]
Short-Term (1985-1986)				
Number of Companies	81	6	20	107
1985 Capital Expenditures ($millions)				
- Before Deducting PIP	699	74	-	625
- Net of PIP	540	62	-	478
1986 Capital Expenditures ($millions)				
- Before Deducting PIP	683	45	-	638
- Net of PIP	612	42	-	570
Long-Term (1987-1990)				
Number of Companies	85	4	18	107

[a]Dollar figures are the net total change indicated by all companies reporting an increase or a decrease.

percent increase in 1985 employment over 1984. Employment in 1986 was expected to be down just over one percent due to a substantial employment cut by one major company. Notwithstanding this slight decline, an additional half billion dollars in capital expenditures by operators would generate considerable employment by the drilling, servicing, and supply contractors. This is the sector which would benefit most, in terms of additional employment, from increased capital expenditures.

3.1.2 Capital Expenditures in Foreign Jurisdictions

Over 80 percent of the respondents indicated that the Western Accord and the provincial royalty changes would not result in their becoming either more or less involved in foreign jurisdictions. This is due to the relatively small number of companies involved in other countries. Fifteen percent of respondents indicated that their involvement in other countries would decrease, while only 4 percent indicated an increase.

3.1.3 Types of Capital Expenditures

In addition to changes in the level of capital expenditures, respondents also indicated changes in the type of capital expenditures to be undertaken on a long-term (1987 to 1990) basis.[6] Over 20 percent of respondents indicated no change in the composition of their expenditures due to the Western Accord and the provincial royalty changes.[7] Onshore exploration and development, production facilities, and enchanced oil recovery were the most positively impacted, in that order. In fact, over 70 percent of respondents expected an increase in onshore exploration and development activity. In contrast, this same area of activity was expected to decrease for 5 percent of respondents. Somewhat larger percentages of respondents expected decreased involvement in the Beaufort Sea and the East Coast Offshore.

3.2 Significant Factors Affecting Respondents

The Western Accord was obviously not the only factor affecting the oil and gas industry's plans. Provincial government royalty changes and other factors, such as the election in 1984 of the federal Progressive Conservative government, were also important. Respondents were asked several questions to determine the relative importance of

specific elements of the Western Accord and the other factors mentioned. The questions were in regards to:

(1) whether the company's capital investment intentions had changed compared with the 1981 to 1983 period;

(2) whether the company's net (after-tax) cash flow would be greater, less, or about the same compared with the 1981 to 1983 period; and

(3) whether the company intended to reinvest a greater, less, or about the same percentage of its net (after-tax) cash flow in 1986 and beyond compared with the 1981 to 1983 period.[8]

In each case, the respondent was to rank the three factors which had the greatest impact in order of importance, and indicate whether the impact was positive or negative. The results are outlined below.

3.2.1 Factors Affecting Capital Expenditure Intentions

A total of 97 of the 107 respondents indicated that their capital expenditure intentions had changed compared with the 1981 to 1983 period. Respondents were positively affected by PGRT phaseout, recent Alberta royalty changes, and the change in federal government, in that order. Far fewer negative factors were noted. The most significant negative factors were oil and/or gas prices and market expectations, and PIP phase-out.

3.2.2 Factors Affecting 1985 and 1986 Cash Flow

Again, 97 out of the 107 respondents expected increases in their net (after-tax) cash flow in 1985 and 1986 compared with the 1981 to 1983 period.[9] "Other" non-government, non-market factors were by far the most significant positive factors. These "other" factors were delineated by companies as acquisitions, mergers, corporate restructuring, and success. In addition to these factors, PGRT phase-out, recent Alberta royalty changes, and oil prices and market expectations were reported, in that order, as positive factors.

Only 7 respondents expected a decrease in 1985 and 1986 cash flow. The most significant negative factors were oil prices and market

expectations, gas prices and market expectations, and gas price decontrol.

Three respondents expected no change in their 1985 and 1986 cash flow.

3.2.3 Factors Affecting Reinvestment Intentions in 1986 and Beyond

Thirty-five percent of respondents indicated that they planned to reinvest a greater percentage of their net (after-tax) cash flow in 1986 and beyond compared with the 1981 to 1983 period. The most important factors in this regard were PGRT phase-out, recent Alberta royalty changes, and gas prices and market expectations. "Other" non-government, non-market factors such as those listed above were also important.

Some 20 percent of respondents indicated that they planned to reinvest a lower percentage of their net (after-tax) cash flow in 1986 and beyond compared with the 1981 to 1983 period. "Other" factors were the most important in this decrease. These factors were generally specified to be debt repayment. PIP phase-out, and oil and/or gas prices and market expectations were also significant in this regard.

Forty-six percent of respondents did not plan to change the percentage of their net (after-tax) cash flow to be reinvested.

It is important to note that the results outlined above refer to the percentage of net cash flow reinvested, not the absolute amount of reinvestment. It is, therefore, possible that actual reinvestment in 1986 and beyond could increase or decrease on a net basis.

3.2.4 Effect of PGRT Phase-Out

Over 65 percent of respondents indicated that their 1986 and 1987 capital expenditure plans were affected by the phase-out of the PGRT. Almost 90 percent of these firms also indicated that their 1985 and 1986 capital expenditures were greater than they would have been without the Western Accord and the other changes. On the other hand, only about half of those who indicated that PGRT phase-out had little or no effect on their capital expenditure plans indicated that their 1985 and 1986 capital expenditures were greater than they would have been without the Accord. Moreover, over 40 percent of those unaffected

by PGRT phase-out did not change their capital expenditure plans due to the Accord and the other changes. These findings indicate some apparent correlation between the effect of PGRT phase-out and the direction of change in capital expenditure plans.

Footnotes

[1]The smaller increase in 1986 gross capital expenditures could be due to some companies moving their expenditures forward one year to take advantage of PIP grants. Companies were asked to indicate the extent to which their 1985 and Q1 1986 capital expenditures were affected by PIP phase-out. However, the proportion of companies who were both affected by PIP phase-out and indicated increased 1985 and 1986 capital expenditures did not differ substantially from the proportion of companies who were not affected by PIP phase-out but still indicated increased 1985 and 1986 capital expenditures. Thus, no correlation is apparent betweeen the timing of expenditures and PIP phase-out.

[2]Despite this decline, the argument presented in Footnote 1 still holds for this group of companies.

[3]This figure was calculated by multiplying the 1984 capital expenditures of each company by the mid-point of the percentage change indicated by that company, and then aggregating for all companies indicating a change. The net increase of $150 million accounts for positive and negative changes.

[4]This question was to be answered outside of the influence of changing world oil prices; i.e., only changes in capital expenditures due to the Western Accord and the provincial royalty changes were to be noted.

[5]These figures were calculated by multiplying the 1985 and 1986 capital expenditures of each company by the mid-point of the percentage change indicated by that company, and then aggregating for 1985 and 1986 for all companies indicating a change. It is implicitly assumed that the same rate of change applies to 1985 and 1986.

[6]The types of capital expenditures listed were onshore exploration and development; East Coast Offshore exploration; Beaufort Sea exploration; production facilities; enchanced oil recovery; oil sands; and pipelines and transportation.

[7]A few companies that had not formulated long-term projections are included in this category.

[8]The 1981 to 1983 period was used as a reference period for the industry under the NEP. The anticipation of changes to the NEP and the change in federal government made 1984 an atypical year.

[9]It is implicitly assumed that the same answer applies to both 1985 and 1986.

Chapter 4

SUMMARY

This report summarizes the results of a survey of oil and gas operators which was designed to evaluate the impact of the Western Accord and recent provincial royalty changes on the short-term (1985 to 1986) and long-term (1987 to 1990) capital expenditure intentions of the industry. The survey results are indicative of the effect of the fiscal policy initiatives on the capital expenditure intentions of the industry prior to the dramatic decline in world oil prices. However, it is clear that a lower price level will offset the intentions indicated in the results to some extent.

The results are based on 107 valid responses. This represents 43 percent of the target population which included CPA and IPAC member companies as well as other major non-association operators. The 107 respondents provided a representative sample of the industry, covering 84 percent of total 1984 oil and gas industry employment and 64 percent of total 1984 industry capital expenditures. Moreover, the distribution of respondents within categories was also characteristic of the industry, with most of the CPA members being large foreign-owned companies, and most of the IPAC members being small and medium-sized Canadian-owned companies.

The survey respondents indicated increasing gross and net capital expenditures in 1985 and 1986. The percentage increase in gross expenditures was lower than for net expenditures because of the phasing out of PIP grants which increases the level of net expenditures relative to a given level of gross expenditures. The largest percentage increases were reported by small companies and by foreign-owned companies.

One-quarter of the survey respondents indicated that their 1984 capital expenditures increased during 1984 in anticipation of the Western Accord and/or as a result of the change in federal government. The net increase was $150 million.

Some 75 percent of respondents indicated that their 1985 and 1986 actual/planned capital expenditures were higher than they would

have been without the Western Accord and the provincial royalty changes. This amounted to about a half billion dollar net increase in each year, for an average increase of about $5 million per company. A slightly larger percentage of respondents indicated that their long-term (1987 to 1990) capital expenditure plans were higher than they would have been without the Western Accord and the provincial royalty changes. In the longer term, capital expenditures were expected to be more concentrated on onshore exploration and development, production facilities, and enhanced oil recovery. Less emphasis was expected in the Beaufort Sea and the East Coast Offshore.

The employment impacts of additional capital expenditures by the operators would be largely felt in the oilfield service and supply industry. The respondents themselves reported a 15 percent increase in employment in 1985 and a small expected increase in 1986.

The respondents consistently indicated PGRT phase-out and Alberta royalty changes as the most significant positive factors influencing their capital expenditure and reinvestment intentions as well as their cash flow. Oil and/or gas prices and market expectations and PIP phase-out were listed as the most significant negative factors in this regard. In addition to these factors, corporate restructuring, acquisitions, and "success" were mentioned as positive factors. Debt repayment was a significant negative factor in the expected percentage of net cash flow to be reinvested.

Overall, the survey responses indicate that the Western Accord and the provincial government royalty changes had a significant positive effect on the capital expenditure intentions of the oil and gas industry. The results presented here are for a representative sample of the industry only and, hence, understate the total (positive) impact. These findings will be obscured by the recent decline in world oil prices. Even if oil prices recover quickly, the industry's 1986 cash flow has already been reduced such that capital outlays will likely not reach the levels indicated in the survey results. Nevertheless, it is clear that the fiscal policy initiatives affected the industry's capital investment intentions positively.

APPENDIX A

SURVEY METHODOLOGY

Appendix A

SURVEY METHODOLOGY

A.1 Questionnaire Design and Administration

The questionnaire was designed to capture the essential information outlined in the study objective: the quantitative effects of the fiscal policy initiatives; and the qualitative estimation of which elements of the initiatives had the most significant impact. Respondents were asked for their 1984 capital expenditures and employment to provide estimates of the coverage of the target population. Other questions covered both short-term and long-term investment plans to determine any timing impacts. The questionnaire was pretested by the advisory committee and subsequently revised to clarify terminology, wording, and instructions. The questionnaire is presented in Appendix B.

The questionnaires were mailed out on January 2, 1986 to a total of 275 oil and gas operators. In early February, each non-respondent was contacted to encourage participation in the survey. As a result of the telephone follow-up and the questionnaire responses, 23 firms were eliminated from the list of firms. These were largely firms with no upstream activities and firms not currently active. This left a target population of 252 firms.

A.2 Questionnaire Editing and Processing

Each questionnaire response was examined to ensure that the questions were properly answered and internally consistent. All respondents with questionable results were contacted to clarify and/or correct the responses.

The editing process identified 25 respondents whose answers were likely influenced by the falling world oil price. This was indicated by either the date of return or the answers themselves. These questionnaires were not included in the results presented. Thus, the results outlined in this report are for the 107 valid respondents only.

APPENDIX B

QUESTIONNAIRE

CONFIDENTIAL CERI SURVEY OF CAPITAL EXPENDITURES IN THE CANADIAN OIL AND GAS INDUSTRY

The purpose of this survey is to provide information on the capital expenditure plans for the upstream operations of oil and gas industry operators and how they have been affected by recent government policy changes. All information will be published in aggregate form only.

All expenses are to be reported on a net (participating) interest basis only. Please report for all subsidiaries for which your company has at least 50 percent ownership. Cost categories such as exploration and production facilities correspond to those of Statistics Canada's annual Net Cash Expenditures survey.

A. COMPANY DATA

(1) What is your company's Canadian Ownership Rating (COR) level? Please circle one:

50% or less 51% - 60% 61% - 65% more than 65%

(2) What is your company's total/expected number of full and part time employees as of: (include part time employees on the basis of the proportion of the year worked)

December 31, 1984 _____ December 31, 1985 _____ December 31, 1986 _____

B. CAPITAL EXPENDITURES

Capital expenditures includes upstream expenditures in exploration, development, and production facilities. Please exclude downstream expenditures related to refining and marketing, as well as acquisitions and debt repayment (i.e. interest and principal).

(3) What were your company's actual capital expenditures in the 1984 calendar year? ($ millions, net of acquisitions)

$ millions _____ before PIP grants $ millions _____ net of PIP grants

(4) (a) In which part of Canada were most of your 1984 capital expenditures made? Please circle one:

B.C. Alberta Saskatchewan Ontario Quebec

NWT Yukon Beaufort Sea East coast offshore

(b) Approximately what percent of your 1984 capital expenditures was spent in the area circled? _____%

(5) Did your 1984 capital expenditures increase _____, decrease _____, or not change _____, during 1984 in anticipation of changes to the National Energy Program and/or as a result of the change in federal government September 1984? If they increased or decreased, by how much? Please check the appropriate category:

less than $250,000	_____	$5 million to $9.9 million	_____
$250,000 to $999,000	_____	$10 million to $19.9 million	_____
$ 1 million to $4.9 million	_____	$20 million or more	_____

(6) What are your company's expected/planned capital expenditures in 1985 and 1986? ($ millions, net of acquisitions)

1985 - $ millions _____ before PIP grants	1986 - $ millions _____ before PIP grants
1985 - $ millions _____ net of PIP grants	1986 - $ millions _____ net of PIP grants

(7) In the current environment of uncertain world oil and natural gas prices, are your 1985 and 1986 capital expenditure plans higher or lower than they would have been in the same environment but without the Western Accord and the provincial royalty changes? If they are higher or lower, please indicate the direction (+/-) of the change and the magnitude of the change in percentage terms. Please circle:

(a) direction: (+) (-)
(b) magnitude in percent: less than 5% 5% to 9% 10% to 19% 20% to 49% 50% or more

(8) To what extent has the phasing out of PIP grants affected your company's total and planned (gross) capital expenditures for 1985 and Q1 1986? Please check one:

A great deal _____ Some _____ Insignificant _____ Not at all _____

(9) To what extent has the phasing out of the PGRT affected your company's capital expenditure plans for 1986 and 1987? Please check one:

A great deal _____ Some _____ Insignificant _____ Not at all _____

(10) In the current environment of uncertain world oil and natural gas prices, are your longer-term, 1987 to 1990, capital expenditure plans higher or lower than they would have been in the same environment but without the Western Accord and the provincial royalty changes? If they are higher or lower, please indicate the direction (+/-) of the change and the magnitude of the change in percentage terms. Please circle:

(a) direction: (+) (-)
(b) magnitude in percent: less than 5% 5% to 9% 10% to 19% 20% to 49% 50% or more

(11) Have your longer-term, 1987 to 1990, capital expenditure plans changed as a result of the Western Accord, recent royalty changes, and/or other changes in the petroleum industry investment environment? If so, please rank in order of importance the three types of capital expenditures most affected by circling the appropriate number and indicate the direction of the change: increased (+) or decreased (-).

	Rank of Importance	Impact (+)/(-)
Exploration and Development - Onshore	1 2 3	_____
Exploration - Eastcoast Offshore	1 2 3	_____
Exploration - Offshore Beaufort Sea	1 2 3	_____
Production facilities	1 2 3	_____
Enhanced Oil Recovery	1 2 3	_____
Oil Sands	1 2 3	_____
Pipelines and transportation	1 2 3	_____
Other (please specify) _____	1 2 3	_____

(12) Will the Western Accord, recent royalty changes, and/or other changes in the petroleum industry investment environment result in a smaller portion of your company's total (gross) Canadian capital expenditures being targetted for "Canada Lands?"

Yes _____ No _____

(13) Will the Western Accord, recent royalty changes, and/or other changes in the petroleum industry investment environment result in your company becoming more or less involved in the exploration for oil and/or gas in foreign jurisdictions?

More involved _____ Less involved _____ No change _____

(14) Have your company's capital investment intentions changed compared with the 1981-1983 period? If so, please rank in order of importance the three factors which have most contributed to this change by circling the appropriate number and indicating their positive (+) or negative (-) impact.

	Rank of Importance	Impact (+)/(-)
(a) The change in federal government	1 2 3	_____
(b) Oil Price Decontrol	1 2 3	_____
(c) Gas Price Decontrol	1 2 3	_____
(d) PGRT phase-out	1 2 3	_____
(e) PIP phase-out	1 2 3	_____
(f) Recent Saskatchewan royalty changes	1 2 3	_____
(g) Recent Alberta royalty changes	1 2 3	_____
(h) Recent British Columbia royalty changes	1 2 3	_____
(i) Oil prices and market expectations	1 2 3	_____
(j) Gas prices and market expectations	1 2 3	_____
(k) Other (please specify) _____	1 2 3	_____

C. CASH FLOW

Cash flow is defined as gross revenue less operating expenses, administration and overhead expenses, interest on debt, income tax actually paid (cash income tax), and royalties (net of royalty tax credits). Do not deduct depreciation, depletion, amortization, deferred taxes, and extraordinary items from cash flow. Cash flow, therefore, equals funds generated from operations.

(15) Will your company's net (after-tax) cash flow in 1985 and 1986 be greater _____, less _____, or about the same _____, compared with the 1981-83 period? If it will be greater or less, please rank in order of importance the three factors which have most contributed to this change by circling the appropriate number and indicating their positive (+) or negative (-) impact.

	Rank of Importance	Impact (+)/(-)
(a) Oil Price Decontrol	1 2 3	_____
(b) Gas Price Decontrol	1 2 3	_____
(c) PGRT phase-out	1 2 3	_____
(d) PIP phase-out	1 2 3	_____
(e) Recent Saskatchewan royalty changes	1 2 3	_____
(f) Recent Alberta royalty changes	1 2 3	_____
(g) Recent British Columbia royalty changes	1 2 3	_____
(h) Oil prices and market expectations	1 2 3	_____
(i) Gas prices and market expectations	1 2 3	_____
(j) Other (please specify) _____	1 2 3	_____

(16) Does your company intend to reinvest a greater _____, less _____, or about the same _____ percentage of its net (after-tax) cash flow in 1986 and beyond compared with the 1981-83 period? If the percentage is greater or less, please rank in order of importance the three factors which have most contributed to this change by circling the appropriate number and indicating their positive (+) or negative (-) impact.

	Rank of importance	Impact (+)/(-)
(a) Oil Price Decontrol	1 2 3	_____
(b) Gas Price Decontrol	1 2 3	_____
(c) PGRT phase-out	1 2 3	_____
(d) PIP phase-out	1 2 3	_____
(e) Recent Saskatchewan royalty changes	1 2 3	_____
(f) Recent Alberta royalty changes	1 2 3	_____
(g) Recent British Columbia royalty changes	1 2 3	_____
(h) Oil prices and market expectations	1 2 3	_____
(i) Gas prices and market expectations	1 2 3	_____
(j) Other (please specify) _____	1 2 3	_____

(17) Please comment on other important factors which affect your immediate or future capital expenditure and/or reinvestment intentions and which may assist in the interpretation of your response to this questionnaire.

_____

_____

_____

_____

_____

_____

* All information will be published in aggregate form only.

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(403) 282-1231
Attention: Janice Pasay

Please complete and return by January 24, 1986 Thank you

Office Use Only

Questionnaire No. _____
COR _____
Activity Measure _____

Company _____

Contact person _____

March 1986

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Presentations by Staff (available upon request)

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Proceedings

International Gas Markets Conference. Proceedings of a Conference held on September 26, 1983, Calgary, Alberta. Edited by Shane Streifel. (Price $45.00, 247 pages) ISBN 0-920522-33-5.

Annual Report

Board of Directors' Report for the Year Ended March 31, 1985.